

Pecos River Basin

Albuquerque District



US Army Corps
of Engineers.
Albuquerque District

2019 Water Management and Civil Works Activities

(This page intentionally left blank)

Contents

1. General	1
2. Water Management Operations	1
A. Snowmelt, Rainfall, and River Flows	1
B. Flood Risk Management Operations	2
C. Non-Flood Risk Management Operations	6
3. Operations and Maintenance	9
A. Two Rivers Project Trash Rack	9
B. Sumner Dam Service Spillway Radial Gates (Flood Control).....	9
C. Other Activities at Dams and Reservoirs	10
4. 2020 Snowpack Update	11
5. Civil Works Authorities and Programs.....	11
A. Rio Grande Basin, Colorado, New Mexico, and Texas.....	11
B. Acequia Irrigation System, New Mexico	12
C. Project Modifications to Improve the Environment (Section 1135)	12
D. Aquatic Ecosystem Restoration (Section 206).....	12
E. Planning Assistance to the States Program	12
6. Flood Plain Management Services Program.....	13
7. National Flood Risk Management Program	13
8. Regulatory Program	14
9. Emergency Management Coordination.....	15

1. General

During calendar year 2019, the U.S. Army Corps of Engineers (USACE), Albuquerque District (Albuquerque District), undertook a wide range of activities in the Pecos River Basin of New Mexico and Texas. These activities consisted of routine reservoir regulation and monitoring of streamflow conditions; operation and maintenance of structures for flood risk management; ecosystem restoration; planning assistance to the states; floodplain management services; and the regulation of dredged or fill material excavation or placement within waterways.

2. Water Management Operations

This section describes the annual hydrology and river flows during calendar year 2019, and describes any Albuquerque District actions to manage river flows throughout the year.

A. Snowmelt, Rainfall, and River Flows

During the winter of 2018-2019, snowpack accumulation in the upper Pecos River Basin was greater than average, resulting in above average snowmelt inflows into Santa Rosa Lake. The daily Snow Water Equivalent (SWE) peaked at the Wesner Springs SNOTEL site in the Santa Fe Mountains on 23 March 2019 with 17.5 inches (116% of the Median for that day). The snowpack in the Rio Hondo Basin, as measured at Sierra Blanca SNOTEL site, peaked on 08 February 2019 with 5.0 inches of SWE (54% of Median for that day).

Table 1. May 1, 2019, NRCS Forecast and Actual Runoff

Most Probable Forecast and Actual March through July Snowmelt Runoff (50% Exceedance)				
Measurement Location	Snowmelt Runoff (x 1,000 Ac-Ft)		Percent of Average	
	May Forecast	Actual	May Forecast	Actual
Gallinas Creek near Montezuma	13.7	12.7 ¹	140	130
Pecos River near Pecos	78	84.7 ¹	137	149
Pecos River near Anton Chico	104	112.4 ¹	165	178
Pecos River above Santa Rosa Lake	80	62.7 ¹	143	112

¹ Data Source: U.S. Geological Survey Daily Mean Data

For the period March 2019 through July 2019, the Natural Resources Conservation Service's (NRCS) May 1 forecast predicted streamflow to be 137% of average for the
07 April 2020

Pecos River near Pecos, and 143% of average for the Pecos River above Santa Rosa Lake. Actual observed snowmelt runoff inflow to Santa Rosa Lake was 62,700 ac-ft, approximately 112% of the 30 year average used by NRCS. Table 1 (above) compares the NRCS forecast runoff to the actual measured runoff.

The calendar year precipitation reported at Santa Rosa Dam and Lake totaled 13.3 inches (about 89% of average) during 2019. A total of 6.9 inches of that total precipitation occurred during the typical monsoon months of June through September, which was then followed by an additional 0.9 inches of rain during the month of October. Another 1.6 inches of precipitation was recorded at Santa Rosa Lake during November and December of 2019.

For the Two Rivers Reservoir Project near Roswell, New Mexico, calendar year precipitation totaled 7.1 inches (about 58% of average) during 2019. A total of 2.5 inches of that total precipitation occurred during the typical monsoon months of June through September, and an additional 3.1 inches of rain was recorded at Two Rivers during the month of October. Another 0.2 inches of precipitation was recorded at the Two Rivers Project during November and December of 2019.

B. Flood Risk Management Operations

In the Pecos River Basin, the Albuquerque District owns and operates the Santa Rosa Dam and Lake Project (Santa Rosa Project) for flood risk management, water conservation, sediment retention, and incidental recreational benefits. The Albuquerque District owns and operates the Two Rivers Project on the Rio Hondo watershed upstream of Roswell for the dedicated purposes of flood risk management and sediment retention. Two Rivers is a “dry dam”, meaning it does not normally impound a lake behind the dam except for when actively operated for flood risk management. The Albuquerque District also has flood risk management authority over the Bureau of Reclamation’s Sumner Dam and Lake and Brantley Dam and Reservoir in accordance with a memorandum of understanding established between the two agencies under Section 7 of the 1944 Flood Control Act. These four Pecos River Basin projects are operated by the Albuquerque District as a coordinated system for flood risk management as described by USACE’s Pecos River Basin, New Mexico – Texas, Master Water Control Manual (1977), and the individual USACE water control plans contained within each of the water control manuals developed and issued for these projects.

On 20 March 2019, the Two Rivers Project Tabletop Exercise was conducted in accordance with the requirements of USACE Engineer Regulation ER 1110-2-1156, *Safety of Dams – Policy and Procedures*. The tabletop exercise provided a forum to communicate project risk to stake holders along the Rio Honda and Pecos River while an exercise scenario allowed participants to practice actions to take in the event of large flood risk management releases or an emergency situation at the dam. Emergency managers and staff from the State of New Mexico, Chavez County, City

of Roswell, Bureau of Reclamation, and the Albuquerque District participated in the exercise. The Albuquerque District also participated in the Bureau of Reclamation’s Sumner, Brantley, and Avalon Dam Functional Exercise on 18 September 2019. Additional details regarding the Bureau of Reclamation’s Functional Exercise can be found in the Bureau of Reclamation’s *Calendar Year 2019 Report to the Pecos River Commission*.

i. Santa Rosa Dam and Lake

Santa Rosa Dam and Lake was not operated for downstream flood risk management during calendar year 2019. The reservoir remained below the top of the 2019 Conservation Entitlement Storage of 100,579 ac-ft (Elevation 4,749.55 ft), and downstream channel capacities were not approached or exceeded during the calendar year. Figure 1 provides plots of Santa Rosa Dam and Lake operations for calendar year 2019. A detailed summary of calendar year 2019 non-flood risk management operations is provided in Section 2.C of this report.

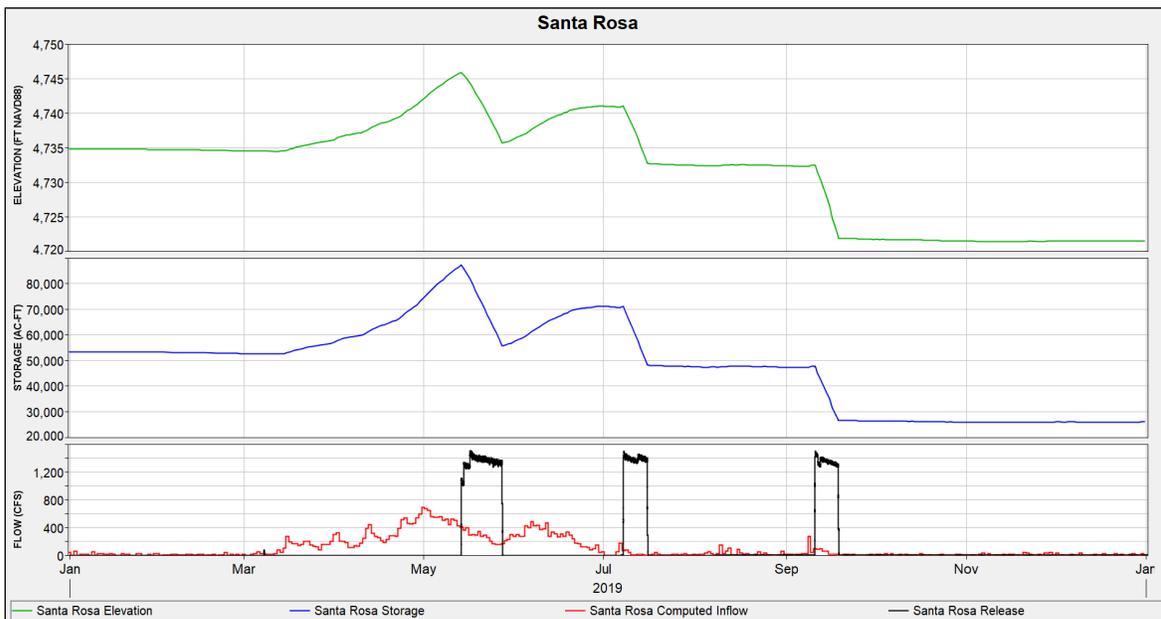


Figure 1. Calendar Year 2019 Santa Rosa Dam and Lake Operations.

ii. Sumner Dam and Lake

Sumner Dam and Lake was not operated for downstream flood risk management during calendar year 2019. The reservoir remained below the top of the conservation pool, and downstream channel capacities were not approached or exceeded during the calendar year. Figure 2 provides plots of Sumner Dam and Lake operations for calendar year 2019. Detailed descriptions of calendar year 2019 non-flood risk management operations at

Sumner Dam and Lake can be found in the Bureau of Reclamation's *Calendar Year 2019 Report to the Pecos River Commission*.

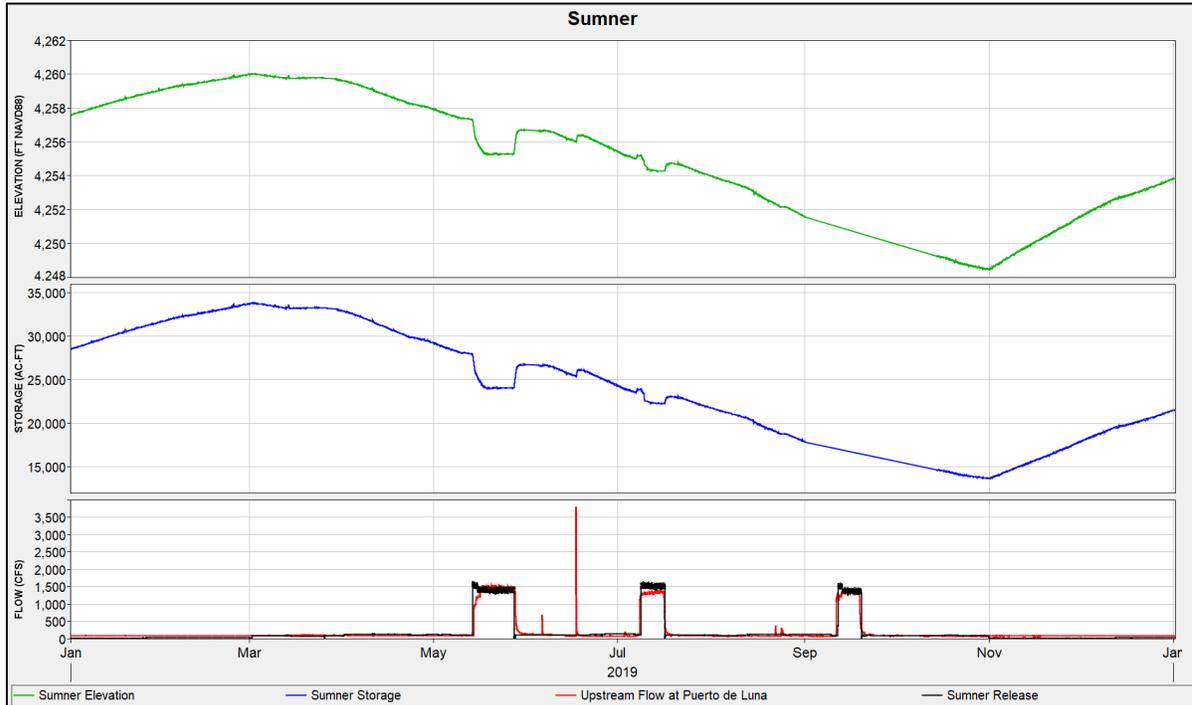


Figure 2. Calendar Year 2019 Sumner Dam and Lake Operations.

iii. Two Rivers Dam and Reservoir

The Two Rivers Reservoir Project was not operated for downstream flood risk management during calendar year 2019. The greatest instantaneous recorded flow through the dam was 49 cfs, which passed through the project unregulated on February 17. On October 1, the U.S. Geological Survey recorded an instantaneous peak flow of 2,340 cfs at the Rio Hondo near Roswell, which exceeds the 1,000 cfs channel capacity. The source of this storm runoff was from unregulated drainages that contribute to the Rio Hondo downstream of the Two Rivers Reservoir Project, although there was a brief outflow of 10 cfs reported below Diamond "A" Dam during that same day. Figure 3 provides plots of Two Rivers Project operations for calendar year 2019.

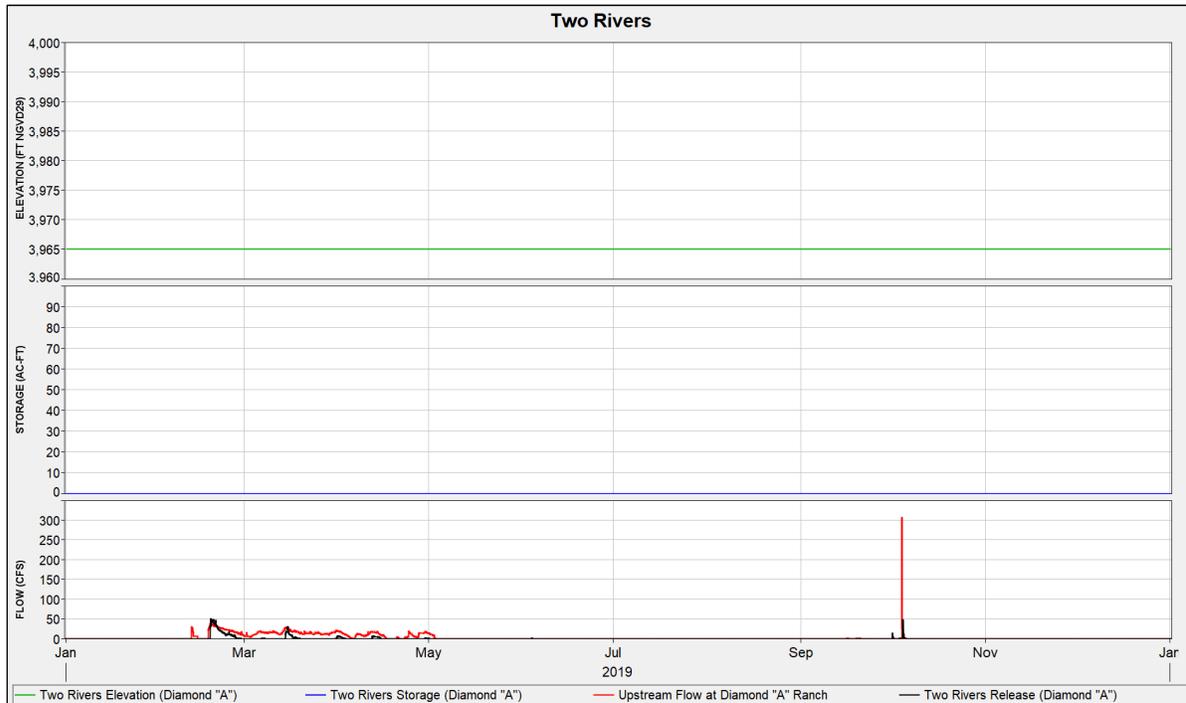


Figure 3: Calendar Year 2019 Two Rivers Project Operations.

iv. Brantley Dam and Reservoir

Brantley Dam and Reservoir was not operated for downstream flood risk management during calendar year 2019. The reservoir remained below the top of the conservation pool, and downstream channel capacities were not approached or exceeded during the calendar year. Figure 4 provides plots of Brantley Dam and Reservoir operations for calendar year 2019. Detailed descriptions of 2019 non-flood risk management operations at Brantley Dam and Reservoir can be found in the Bureau of Reclamation’s *Calendar Year 2019 Report to the Pecos River Commission*.

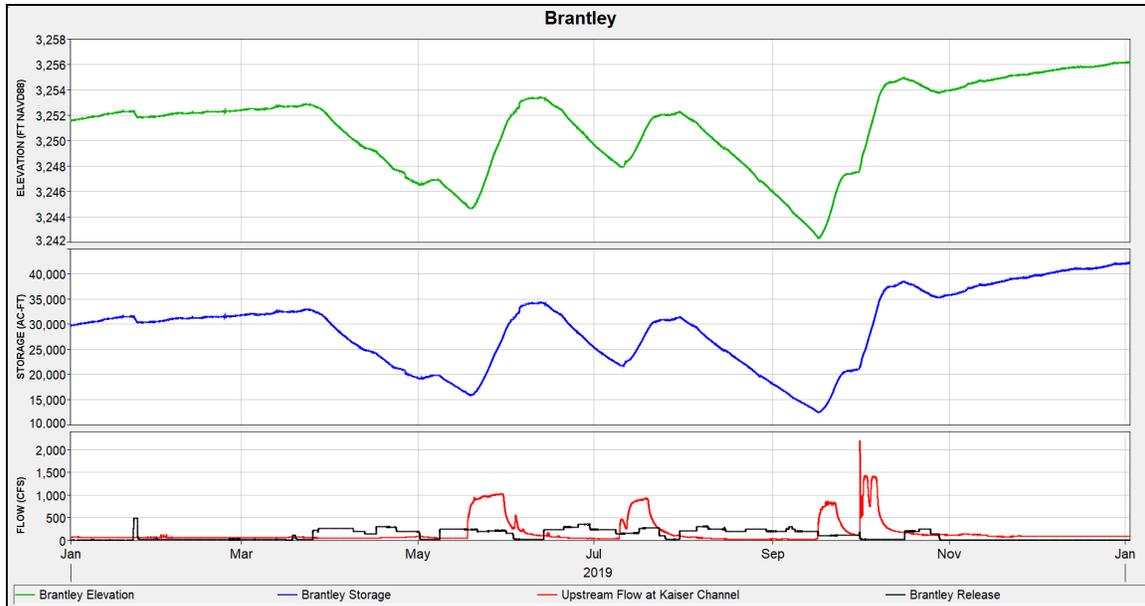


Figure 4. Calendar Year 2019 Brantley Dam and Lake Operations.

C. Non-Flood Risk Management Operations

Santa Rosa Lake was at elevation 4,734.77 ft (NAVD 88) at the beginning of 2019, corresponding to 53,409 ac-ft of storage. The maximum storage occurred during spring runoff on May 13, just prior to the first block release, at water surface elevation 4,745.88 ft (NAVD 88) with 87,134 ac-ft of storage. Minimum storage at Santa Rosa Lake occurred on December 20 when the water surface elevation dropped to 4,721.45 ft (NAVD 88), corresponding to 25,965 ac-ft of storage. The reservoir ended the year with a lake elevation of 4,721.49 ft (NAVD 88), corresponding to 26,026 ac-ft of storage. Table 2 summarizes Pecos reservoir storage at the beginning and end of calendar year 2019 compared to the 20 year averages.

Table 2. End of Year Storage Compared to 20 Year Average

Reservoir	2019 EOY Storage (ac-ft)	2018 EOY Storage (ac-ft)	Average EOY ¹ Storage (ac-ft)
Santa Rosa ²	26,026	53,409	48,493
Sumner ³	21,531	28,597	23,681
Brantley ³	42,110	29,776	25,506
Avalon ³	0	0	1,813

¹ Average End of Year Storage for the period of 1998 through 2018

² Storage data from USACE

³ Storage data from the Bureau of Reclamation

During calendar year 2019, the Albuquerque District scheduled and executed three block release from Santa Rosa Dam and Lake that efficiently conveyed CID conservation storage water downstream to Sumner Lake and Brantley Lake. These block releases are discussed in detail in the following sections of this report.

i. May 13 – May 27 Santa Rosa Block Release

At the request of Carlsbad Irrigation District (CID) and the Bureau of Reclamation, a block release was scheduled to release an initial target volume of 37,000 ac-ft from the Santa Rosa Lake conservation pool to begin on May 13, 2019. Once this water is released from Santa Rosa Lake, Bureau of Reclamation and CID manage the scheduling of operations to route this water through Sumner Lake downstream to Brantley Reservoir. Based on a projected target release rate of 1,300 cfs to 1,350 cfs, it was projected that the target release volume would be achieved sometime during business hours on May 28.

The Albuquerque District initiated the block release from Santa Rosa Dam at 0800 hours on May 13, and ramped-up the release rate in three steps to achieve 1,200 cfs by 1200 hours that same day. Because of National Weather Service forecasts for potentially severe weather and the possibility of intense rainfall over the weekend and early into the following week, the Albuquerque District made the decision on May 10 to target the lower initial release rate of 1,200 cfs rather than 1,350 cfs.

Santa Rosa Dam gate settings were periodically adjusted to maintain the desired release rate to compensate for the decrease in discharge as lake elevation dropped over time. On May 14, the release rate was increased to 1,320 cfs following the original release plan. On May 16, the rate of release was increased to 1,459 cfs. The gates were held constant at this opening for the remainder of the release allowing the rate of release to slow as the lake elevation dropped over time. This increased rate of release allowed the Albuquerque District to compensate for the slower start up rates, while still maintaining a safe flow rate through the City of Santa Rosa. On Friday, May 24, notifications were sent out to all stakeholders that the target 37,000 ac-ft release volume would be achieved on Monday, May 27, one day earlier than originally scheduled.

At the beginning of the block release at 0800 hours on May 13, Santa Rosa Lake had a total content of 87,100 ac-ft at lake elevation 4,745.87 ft (NAVD 88). At the end of the block release at 1000 hours on May 27, Santa Rosa Lake had a total content of 55,663 ac-ft at lake elevation 4,735.63 ft (NAVD 88). The lake surface elevation dropped a total of 10.24 feet during the duration of the block release. Based on USACE data, a total of 37,920 ac-ft was released through Santa Rosa Dam during the block release. USGS daily flow data for

the Pecos River below Santa Rosa Dam gage sums to 37,176 ac-ft for the period of the block release.

ii. July 7 – July 15 Santa Rosa Block Release

CID and Bureau of Reclamation requested a 2nd block release to deliver an initial target volume of 23,000 ac-ft from the Santa Rosa Lake conservation pool beginning on July 7, 2019. Based on a projected target release rate of 1,350 cfs to 1,400 cfs, it was projected that the target release volume would be achieved sometime during business hours on July 15.

The Albuquerque District initiated the block release from Santa Rosa Dam at 0800 hours on July 7, and ramped-up the releases in three steps to achieve 1,475 cfs by 1200 hours on the same day. Since the initial release rate came out greater than anticipated, additional gate changes were not made until July 12 when the rate of release was increased slightly to maintain the target release rate over the coming weekend. The release was ramped down from 1,364 cfs to all gates closed on July 15 using two steps; the first decrease at 1400 hours and the final shut down occurring at 1600 hours.

At the beginning of the block release at 0800 hours on July 7, Santa Rosa Lake had a total content of 71,032 ac-ft at lake elevation 4,740.98 ft (NAVD 88). At the end of the block release at 1600 hours on July 15, Santa Rosa Lake had a total content of 48,173 ac-ft at lake elevation 4,732.68 ft (NAVD 88). The lake surface elevation dropped a total of 8.30 feet during the duration of the block release. Based on USACE data, a total of 22,583 ac-ft was released through Santa Rosa Dam during the block release. USGS daily flow data for the Pecos River below Santa Rosa Dam gage sums to 24,365 ac-ft for the period of the block release.

iii. September 10 – September 18 Santa Rosa Block Release

CID and Bureau of Reclamation requested a 3rd block release to deliver an initial target volume ranging from 21,000 ac-ft to 22,000 ac-ft from the Santa Rosa Lake conservation pool beginning on September 10. Based on a projected target release rate of 1,350 cfs to 1,400 cfs, it was projected that the target release volume would be achieved sometime during business hours on September 18.

The Albuquerque District initiated the block release from Santa Rosa Dam at 0800 hours on September 10, and ramped-up the release in three steps to achieve the target release of approximately 1,360 cfs by 1200 hours on the same day. USGS reported a final discharge rate of about 1,480 cfs at 1300 hours, which was likely 100 to 150 cfs greater than the true release rate due to measurement and reporting errors with the data collection platform (DCP) used at the Pecos River below Santa Rosa Dam gage. USGS completed a

07 April 2020

measurement at the below Santa Rosa gate the morning of September 11, which identified that the gage was over-reporting discharge by about 115 cfs due to the data collection platform (DCP) incorrectly measuring and reporting river stage. This was corrected by USGS at the time of their visit.

A gate change was executed at 0800 hours on September 12 to increase the release rate to approximately 1,400 cfs. The Santa Rosa Dam outlet works gates were held at this setting and the release rate was allowed to gradually decline with the drop in lake elevation, until ramp-down of the block release started. The release was ramped down from 1,296 cfs to all gates closed using three steps that were made between 0800 hours to 1200 hours on September 18.

At the beginning of the block release at 0800 hours on September 10, Santa Rosa Lake had a total content of 47,715 ac-ft at lake elevation 4,732.49 ft (NAVD 88). At the end of the block release at 1200 hours on September 18, Santa Rosa Lake had a total content of 26,710 ac-ft at lake elevation 4,721.93 ft (NAVD 88). The lake surface elevation dropped a total of 10.56 feet during the duration of the block release. Based on USACE data, a total of 21,482 ac-ft was released through Santa Rosa Dam during the block release. USGS daily flow data for the Pecos River below Santa Rosa Dam gage sums to 21,711 ac-ft for the period of the block release.

3. Operations and Maintenance

A. Two Rivers Project Trash Rack

During 2019, the Albuquerque District contracted for the repair of the approach channel upstream of the trash rack on the Rocky Arroyo side of the Two Rivers Project. This work is expected to be completed in February 2020. The next phase of this work will involve the actual rehabilitation of the trash rack.

B. Sumner Dam Service Spillway Radial Gates (Flood Control)

Sumner Dam is a Section 7 high-hazard dam in the Albuquerque District's Scheduling Reservoir Operations inventory that is owned by the Bureau of Reclamation. Standing agreements signed by USACE, Bureau of Reclamation, and CID define the operation and maintenance roles of both the Bureau of Reclamation and the Albuquerque District with regards to the operation of Sumner Dam during normal operations and flood risk management operations. The agreements also define maintenance responsibilities and operating criteria for the flood related appurtenances of Sumner Dam, such as the emergency spillway, service spillway, and the service spillway radial gates and the radial gate operating systems.

Bureau of Reclamation modified the automatic radial gate operating system (ARGOS) for Sumner Dam's service spillway radial gates in January 2019 by installing a bulkhead at the inlet that disabled the ARGOS so that it would no longer operate for automated gate operation as a function of the lake water surface elevation. Based on a hydrologic model study produced by Reclamation's Denver Technical Center in 1956 (HYD-416) and Design Memorandums produced by USACE, the Albuquerque District believes that the ARGOS system was originally designed to prevent gate overtopping and to eliminate the potential for severe and potentially structure endangering surging if the gates are used to control discharge above lake water surface elevation 4,275 ft. The Albuquerque District first learned of this modification to the ARGOS system during the course of the Pecos Emergency Management Functional Exercise held by the Bureau of Reclamation on September 18, 2019.

Maintaining the ARGOS system set for automated operation once the reservoir pool exceeds elevation 4,275 ft is required by the standing USACE Sumner Water Control Plan and the operating agreements referenced above. A meeting between the Bureau of Reclamation and the Albuquerque District was held on October 30, 2019 to discuss the issue, and a formal letter was sent to the Bureau of Reclamation on January 6, 2020 requesting that the Bureau of Reclamation restore the automatic operation of the ARGOS. In this letter, the Albuquerque District also requested that the Bureau of Reclamation complete a comprehensive evaluation of the service spillway and radial gate hydraulics with regards to the potentially structure endangering surging that was identified in Reclamation's hydraulic model study of the service spillway, Hydraulic Laboratory Report No. Hyd-416.

The Bureau of Reclamation notified the Albuquerque District via e-mail on February 12, 2020 that the ARGOS had been made operational by removing the bulkhead installed in January 2019. On March 31, a letter was received from the Bureau of Reclamation that details the status of work and the anticipated path forward related to the service spillway radial gates and the ARGOS system.

C. Other Activities at Dams and Reservoirs

i. Zebra and Quagga Mussel Monitoring

Santa Rosa Lake project personnel conducted plankton sampling in June and July 2019 using a 65-micron (μm) mesh net to filter a 1,000-liter volume at three sites. The monitoring was conducted in association with monthly water quality monitoring to optimize data collection. The monthly water quality parameters (temperature, dissolved oxygen, conductivity, pH, secchi disk) provide useful information for understanding ecosystem dynamics in each lake. The Albuquerque District shipped preserved plankton samples to Bureau of Reclamation's Denver laboratory for microscopic analysis. Current protocol requires positive identification of veligers (larvae) using microscopy to declare a water body infested. None of the Santa Rosa Lake samples tested positive for zebra or quagga mussels.

07 April 2020

4. 2020 Snowpack Update

The April 1st NRCS Water Supply Forecast indicates that the most probable (50th percentile) March through July snowmelt inflow forecast for Santa Rosa Lake is 37,000 ac-ft (66% of average).

For the Rio Hondo Basin, the March through June most probable (50th percentile) snowmelt runoff forecast for the Rio Ruidoso at Hollywood is 5,000 ac-ft (75% of average) as reported in the April 1st NRCS Water Supply Forecast.

5. Civil Works Authorities and Programs

This section describes projects for ecosystem restoration and flood risk management in Colorado, New Mexico, and Texas.

A. Rio Grande Basin, Colorado, New Mexico, and Texas

The Rio Grande Basin Program was authorized by Section 729 of the Water Resources Development Act (WRDA) of 1986, as amended. Under this program, a watershed assessment study was initiated in 2011 to investigate salinity issues within the Pecos River Basin. The initial watershed assessment was completed in 2012 and the watershed assessment for the Pecos River Basin started in March 2014. The amended study area includes the Pecos River from Santa Rosa, New Mexico to the confluence with the Rio Grande in Texas. The overall objectives of the watershed assessment are to compile available research and data, identify critical data gaps in the watershed, identify significant areas of salinity and priority areas for salinity control projects within the basin, and develop watershed management best practices.

The Rio Grande Basin, New Mexico, and Texas watershed study was completed by USGS and the report has been electronically published as *Scientific Investigations Report 2019-5071, Pecos River Basin Salinity Assessment, Santa Rosa Lake, New Mexico, to the Confluence of the Pecos River and the Rio Grande, Texas, 2015* (USGS website: <https://pubs.er.usgs.gov/publication/sir20195071>). This is the first scientific study that evaluates a larger segment of the Pecos River. The main objective is to identify sites that contribute to degrading the quality of the water that New Mexico is obligated to deliver to Texas. The Albuquerque District's internal product will be a Letter Report for USACE Head Quarters, the Assistant Secretary of the Army, Congress, and the Office of Management and Budget. The Letter Report is scheduled for completion in February 2020.

The Albuquerque District continues to work with the New Mexico and Texas Sponsor Representatives to develop the final GIS mapping and end products for the project's closeout.

B. Acequia Irrigation System, New Mexico

The Acequia Irrigation System Program addresses the rehabilitation of historically and culturally significant acequia community ditch systems throughout the State of New Mexico. The State of New Mexico is the local sponsor for the program. There are currently no projects associated with this program in the Pecos Basin.

C. Project Modifications to Improve the Environment (Section 1135)

Under the authority provided by Section 1135 of WRDA 1986, as amended, and at the request of a local sponsor, USACE can study and implement improvements to degraded ecosystem structure, function, and dynamic processes to create less degraded and more natural conditions in locations where a USACE project has contributed to the impairment of the ecosystem. In 2019, there were no active Section 1135 projects in the Pecos River Basin.

D. Aquatic Ecosystem Restoration (Section 206)

Under the authority provided by Section 206 of WRDA 1996, as amended, and at the request of a local sponsor, USACE can study and implement aquatic ecosystem restoration and protection projects if the project will improve environmental quality, is in the public interest, and is cost effective.

The Janes Wallace Section 206 Aquatic Ecosystem Restoration Project is located on El Rito Creek, a tributary of the Pecos River downstream of Santa Rosa, New Mexico. The proposed ecosystem restoration project would restore degraded aquatic and wetland ecosystem structure, function, and dynamic processes. The project would also restore the system to a less degraded and more natural condition, increase the pool size, and improve the diversity and types of aquatic habitat for native fish and other aquatic species. Exotic woody vegetation would be removed from around the lake and along El Rito Creek to the confluence with the Pecos River, and these areas would be revegetated with native plant species. The study is on hold while the sponsor finalizes the new dam design.

E. Planning Assistance to the States Program

Section 22 of WRDA 1974, as amended, provides authority for USACE, under the Planning Assistance to the States (PAS) Program, to assist states, local governments, and other non-Federal entities in the preparation of comprehensive plans for the development, use, and conservation of water and related land resources. Section 208 of WRDA 1992 amended WRDA 1974 to include Indian tribes. Studies are cost shared on a 50/50 cost matching basis between the Federal and non-Federal entities. The Albuquerque District had no active PAS studies within the Pecos River Basin in 2019.

6. Flood Plain Management Services Program

The Flood Plain Management Services (FPMS) Program authority stems from Section 206 of the Flood Control Act of 1960 (Public Law 86-645), as amended. The objective of the FPMS Program is to support comprehensive floodplain management planning with technical services and planning guidance at all appropriate governmental and community levels. These services are provided to State, regional, and local governments and to Indian tribes at no cost. However, Section 321 of WRDA 1990 requires recovering the cost of services provided to Federal agencies and to private entities, and a fee schedule has been established. Section 202 of WRDA 1999 (Public Law 106-53) authorizes the Secretary of the Army to collect funds contributed voluntarily from State, regional, and local governments, Indian tribes, and other non-Federal public agencies for the purpose of recovering the cost of providing services pursuant to Section 206.

Services available include assistance in interpretation and evaluation of basic flood-hazard data, including the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps; guidance in preparation of floodplain regulations; advice on the use of data regarding possible alternative developments in flood-prone areas; guidance on structural and nonstructural measures that might be employed to reduce flood hazard; and, in some cases, development of basic flood-hazard data.

The Albuquerque District did not conduct any FPMS studies in the Pecos River Basin during calendar year 2019.

Governmental agencies or persons having a need for floodplain management services should contact the U.S. Army Corps of Engineers, Albuquerque District, Hydrology and Hydraulics Section, FPMS Program, Planning Branch, Planning, Programs, and Project Management Division, 4101 Jefferson Plaza NE, Albuquerque, New Mexico 87109-3435 or telephone 505-342-3328.

7. National Flood Risk Management Program

USACE established the National Flood Risk Management Program (NFRMP) in May 2006 with follow up initial guidance in October 2007 to integrate and synchronize USACE activities, both internally and with counterpart activities of the Department of Homeland Security, FEMA, other Federal agencies, State organizations, and regional and local partners and stakeholders. The NFRMP's objective is to foster open and collaborative mitigation planning, response, and recovery efforts both within USACE programs, activities, and initiatives and externally with our federal, state, local, and tribal partners.

One component of the NFRMP is the Levee Safety Program. The USACE Levee Safety Program was established as a result of the National Levee Safety Act of 2007, which was authorized in WRDA 2007. The program entails a robust inspection and risk assessment program akin to the USACE Dam Safety Program and has

07 April 2020

consolidated current USACE vegetation guidance into one Engineering Technical Letter (ETL). ETL 1110-2-583, *Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures* was issued April 30, 2014, to provide vegetation management guidelines. This document is available via the “Guidance & Policy” link at the USACE publication website:

http://www.publications.usace.army.mil/Portals/76/Publications/EngineerTechnicalLetters/ETL_1110-2-583.pdf?ver=2015-11-09-114428-587

Currently, initial risk assessments (levee screenings) are being conducted on all levee systems within the USACE levee program. Once finalized the levee screening results will be communicated to sponsors and ultimately to the general public in order to improve public awareness and understanding of flood related hazards and risks. Levee certification by the sponsor, the levee owners, is required before levees can be accredited by FEMA to provide base flood protection. Levee risk assessment progress can be followed on the publically available National Levee Database website at <https://levees.sec.usace.army.mil/#/>.

Another component of the NFRMP is the Inspection of Completed Works/PL 84-99 Rehabilitation and Inspection Program (ICW/RIP). The ICW/RIP is the USACE program that provides for the inspection and rehabilitation of eligible Federal and eligible non-Federal flood risk reduction structures. Historically, the purpose of USACE inspections was to verify that the structures were operated and maintained in accordance with guidance specifically identified in the structure’s operations and maintenance manual. Starting in mid-2006, the purpose of USACE inspections changed, and these inspections now verify that structures are being properly maintained and operated for continued inclusion in the ICW/RIP program and, when necessary, upgraded to meet current USACE standards.

Information regarding the Levee Safety Program and the ICW/RIP can be obtained by contacting Bruce Jordan P.E., Levee Safety Program Manager, U.S. Army Corps of Engineers, Albuquerque District, Geotechnical and Environmental Engineering Branch, Engineering and Construction Division, 4101 Jefferson Plaza NE, Albuquerque, New Mexico 87109-3435 or telephone 505-342-3427.

8. Regulatory Program

Section 404 of the Clean Water Act requires that a permit be obtained from USACE prior to discharging dredged or fill materials into waters of the United States, including adjacent wetlands. USACE’s responsibility under Section 10 of the Rivers and Harbors Act is to regulate any work in, or affecting, navigable waters of the United States. In the Pecos River Basin within the Albuquerque District, approximately 63 activities were reviewed during 2019. Of the activities reviewed, 32 were covered under Nationwide General Permits or other general permits, and 31 required no

07 April 2020

action. Nationwide Permits are activity-specific general permits, issued by the Chief of Engineers in Washington, D.C., for projects that have minimal impact on the aquatic environment. Nationwide Permits are designed to regulate these minimal impacts with little, if any, delay or paperwork. The current Nationwide Permits were authorized March 19, 2017, and are valid for five years from that date.

Persons or agencies planning to conduct fill or excavation activities in any waterway, including wetlands, are advised to contact the U.S. Army Corps of Engineers, Albuquerque District, Regulatory Division, New Mexico/Texas Branch, 4101 Jefferson Plaza NE, Albuquerque, New Mexico 87109-3435 or telephone 505-342-3301.

9. Emergency Management Coordination

Public Law 84-99 provides USACE with the authority to assist State and local governments before, during, and after flood events. The State can request these services by contacting the U.S. Army Corps of Engineers, Albuquerque District, Readiness and Contingency Operations Office, 4101 Jefferson Plaza NE, Albuquerque, New Mexico 87109-3435 or telephone 505-342-3686.

In regions receiving significant spring snowmelt runoff, or in the event of major rainfall flooding, and upon request of the State Governor's Office, or Pueblos/Tribes, the Albuquerque District Readiness and Contingency Operations Office is prepared to assist in urban areas with flood fight activities that exceed the capabilities of local authorities. This includes but is not limited to flood fight training, sandbag training, sandbags, technical assistance, direct assistance, and post-wildfire flood risk assessments.